

Dr. Duke's Phytochemical and Ethnobotanical Database

Chemicals Found in *Origanum majorana*

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	ALPHA-HUMULENE	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
2	ALPHA-HUMULENE	Essential Oil	--	--		
11	ALPHA-PHELLANDRENE	Plant	18	103	-0.4516907541435066	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	ALPHA-PHELLANDRENE	Essential Oil	--	26000	-0.08979419499208481	
28	ALPHA-PINENE	Plant	15	86	-0.42061428285892105	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
28	ALPHA-PINENE	Essential Oil	--	19000	-0.39287982164920143	
13	ALPHA-TERPINENE	Leaf	138	1620	0.5247481960598754	
13	ALPHA-TERPINENE	Plant	183	1050	2.256141022146814	
13	ALPHA-TERPINENE	Leaf Essent. Oil	--	20000	0.9980633895203395	
13	ALPHA-TERPINENE	Essential Oil	--	68000	1.1298113026643404	
23	ALPHA-TERPINEOL	Leaf Essent. Oil	--	49000	0.12538106410891894	
23	ALPHA-TERPINEOL	Essential Oil	--	7000	-0.4630448703246903	
36	ANETHOLE	Essential Oil	--	--		
15	ARbutin	Leaf	--	--		Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp.
15	ARbutin	Shoot	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
112	ASCORBIC-ACID	Plant	514	555	-0.4633944303261279	USDA's Ag Handbook 8 and sequelae)
53	BETA-CAROTENE	Plant	48	52	-0.44555296413975976	USDA's Ag Handbook 8 and sequelae)
3	BETA-PHELLANDRENE	Essential Oil	--	14000	0.06102018933373759	
3	BETA-PHELLANDRENE	Plant	27	155	0.6528644248365976	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
13	BETA-PINENE	Essential Oil	--	4000	-0.6415683948649324	
13	BETA-PINENE	Plant	6	34	-0.3987756455135756	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
47	BETA-SITOSTEROL	Plant	520	540	-0.002824127733764179	
35	BORNEOL	Plant	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
4	BORON	Plant	28	48	-0.3285060001497114	Betting on Boron, Unpublished draft by J. A. Duke on file at USDA, draft and papers relating to boron percentages. Includes Internat. Z. Vit. Ern. Forschung 43:1973 (boron).
4	CADINENE	Plant	--	--		
102	CAFFEIC-ACID	Leaf	--	14100	1.2401706840629567	
102	CAFFEIC-ACID	Shoot	--	--		
102	CAFFEIC-ACID	Plant	--	--		List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
28	CALCIUM	Plant	17925	23625	1.073474951470644	USDA's Ag Handbook 8 and sequelae)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	CAMPESTEROL	Plant	--	30	-0.5969128791852656	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)
37	CARVACROL	Essential Oil	388800	795000	1.956448823344398	
37	CARVACROL	Plant	1092	6261	0.6439962127754266	
19	CARVONE	Essential Oil	--	27000	-0.7525161257485199	
19	CARVONE	Plant	12	69	-0.42182429771324575	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
31	CARYOPHYLLENE	Plant	52	1307	1.1553486678162894	
31	CARYOPHYLLENE	Essential Oil	--	61000	0.37737527199565624	
3	CHAVICOL	Plant	138	791	1.414213562373095	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
77	CHLOROGENIC-ACID	Shoot	--	--		
53	CITRAL	Plant	--	--		
12	COPPER	Plant	11	11	-0.33406963620245544	USDA's Ag Handbook 8 and sequelae)
4	COSMOIIN	Pollen Or Spore	--	--		
4	COSMOIIN	Shoot	--	--		
3	CYNAROSIDE	Shoot	--	--		
8	DELTA-3-CARENE	Plant	--	--		
13	DIOSMETIN	Shoot	--	--		

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
12	ESTRAGOLE	Plant	--	--		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
1	ETHYL-LAURATE	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	ETHYL-MYRISTATE	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	ETHYL-MYRISTATE	Essential Oil	--	--		
1	ETHYL-OLEATE	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
1	ETHYL-PALMITATE	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
76	EUGENOL	Plant	200	1152	0.46992531158530604	
76	EUGENOL	Leaf Essent. Oil	--	255000	-0.34777061356900674	
15	FIBER	Plant	170170	220600	-0.016312721496673874	
11	GAMMA-TERPINENE	Leaf Essent. Oil	--	180000	1.627787588377096	
11	GAMMA-TERPINENE	Leaf	210	2370	4.197708389548963	
11	GAMMA-TERPINENE	Essential Oil	48000	213000	2.0863713351738005	
35	GERANIOL	Essential Oil	--	--	-0.677218689998221	
35	GERANIOL	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	GERANYL-ACETATE	Plant	12	69	-0.4229146637825368	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
32	HYDROQUINONE	Shoot	--	--		
32	HYDROQUINONE	Plant	--	--		
6	IRON	Plant	750	975	0.4098917877276588	USDA's Ag Handbook 8 and sequelae)
1	LABIATIC-ACID	Plant	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
1	LAURIC-ACID-ETHYL-ESTER	Essential Oil	--	--		
60	LIMONENE	Essential Oil	--	38000	-0.5183422055574805	
60	LIMONENE	Plant	18	103	0.5651398458031535	
60	LIMONENE	Leaf Essent. Oil	--	24000	-0.5721355904683862	
53	LINALOOL	Shoot	--	164100	5.787049323750151	
53	LINALOOL	Essential Oil	--	7000	-0.5517579885648786	
53	LINALOOL	Plant	99	568	0.4132286080067176	
7	LINALYL-ACETATE	Plant	3	17	0.8790079353067117	
27	LINOLEIC-ACID	Seed	10000	10000	-0.8321526228533093	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
7	LUTEOLIN-7-GLUCOSIDE	Plant	--	--		Williamson, E. M. and Evans, F. J., Potter's New Cyclopaedia of Botanical Drugs and Preparations, Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989.
65	MAGNESIUM	Plant	3300	3900	-0.0516230386408005	USDA's Ag Handbook 8 and sequelae)

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
14	MANGANESE	Plant	54	54	-0.30787688494994525	USDA's Ag Handbook 8 and sequelae)
63	MENTHOL	Essential Oil	--	--		
6	METHYL-CHAVICOL	Plant	96	550	-0.9033588179021271	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
22	MYRCENE	Essential Oil	--	--		
22	MYRCENE	Plant	18	103	-0.36294107421133504	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
5	NERYL-ACETATE	Plant	--	--		Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
39	NIACIN	Plant	41	44	-0.45847508395560455	USDA's Ag Handbook 8 and sequelae)
2	OCIMENE	Leaf	--	--		Leung, A. Y. and Foster, S. 1995. Encyclopedia of Common Natural Ingredients 2nd Ed. John Wiley & Sons, New York. 649 pp.
64	OLEANOLIC-ACID	Plant	4700	4700	0.19004070814741195	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
18	OLEIC-ACID	Seed	8000	8000	-0.9133355142467426	List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.
1	OLEIC-ACID-ETHYL-ESTER	Essential Oil	--	--		
4	ORIENTIN	Shoot	--	--		
25	P-COUMARIC-ACID	Leaf	--	1100	-0.06115839551859982	
16	P-CYMENE	Plant	21	120	-0.3655894027588645	

Activity Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
16	P-CYMENE	Leaf Essent. Oil	--	20000	-0.4814765484301064	
16	P-CYMENE	Essential Oil	--	47000	-0.2453610155054874	
1	PALMITIC-ACID-ETHYL-ESTER	Essential Oil	--	12000		
26	PHENOL	Plant	1431	8204	1	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
4	PHOSPHORUS	Plant	2670	3725	0.06551800424758951	USDA's Ag Handbook 8 and sequelae)
2	PHYTOSTEROLS	Plant	600	650	-0.8083557786797939	USDA's Ag Handbook 8 and sequelae)
14	POTASSIUM	Plant	14500	17225	-0.31886329834759486	USDA's Ag Handbook 8 and sequelae)
15	RIBOFLAVIN	Plant	3	3	-0.5861819139119265	USDA's Ag Handbook 8 and sequelae)
57	ROSMARINIC-ACID	Shoot	--	9400	-0.4142658927809455	
57	ROSMARINIC-ACID	Inflorescence	--	33000	-0.13649164081487425	
57	ROSMARINIC-ACID	Plant	33000	33000	0.281534733255827	Fitoterapia No.62: 166.
87	RUTIN	Shoot	--	--		
5	SABINENE	Essential Oil	--	82000	-0.015057370464564934	
5	SABINENE	Plant	75	430	4.99614301661853	
5	SABINENE	Leaf Essent. Oil	--	30000	-0.13554261008120452	
1	SODIUM	Plant	675	935	-0.25231992508556245	USDA's Ag Handbook 8 and sequelae)
12	STIGMASTEROL	Plant	50	55	-0.7296625889468641	Spiller, G. A. 1996 (Spiller, G. A. Ed. 1996. CRC Handbook of Lipids in Human Nutrition. CRC Press. Boca Raton, FL. 233 pp.)

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35	TANNIN	Plant	--	--		ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
23	TERPINEN-4-OL	Leaf Essent. Oil	--	310000	2.081229334325422	
23	TERPINEN-4-OL	Essential Oil	--	103000	0.3836938468472445	
23	TERPINEN-4-OL	Leaf	135	1530	0.5332933928836353	
23	TERPINEN-4-OL	Plant	1365	7826	5.665014759682814	
23	TERPINEN-4-OL	Shoot Essent. Oil	--	176700	1.412151043457717	
9	TERPINOLENE	Plant	75	430	3.057637791806235	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
9	TERPINOLENE	Leaf	50	600	0.5322296849470326	
9	TERPINOLENE	Essential Oil	--	20000	-0.2455444370688689	
31	THIAMIN	Plant	3	3	-0.3909910138264638	USDA's Ag Handbook 8 and sequelae)
71	THYMOL	Essential Oil	15000	40000	-0.930874809378824	
71	THYMOL	Shoot Essent. Oil	--	115500	1.9615538252670992	
8	TRANS-ANETHOLE	Plant	8	43	-0.45493255526565674	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
89	URSOLIC-ACID	Plant	500	2100	-0.695295811066768	ANON. 1948-1976. The Wealth of India raw materials. Publications and Information Directorate, CSIR, New Delhi. 11 volumes.
18	VITEXIN	Shoot	--	--		
77	ZINC	Plant	32	43	-0.09018412071860993	